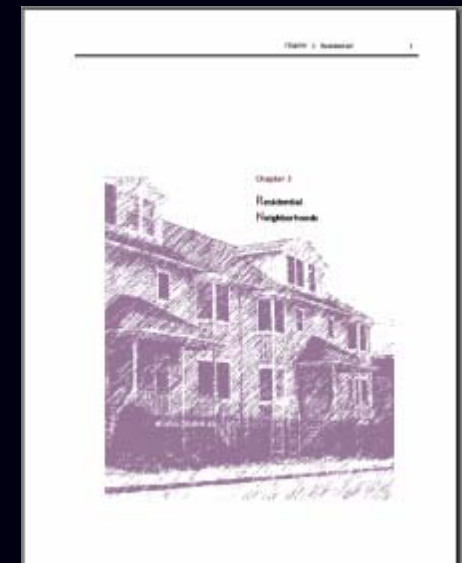
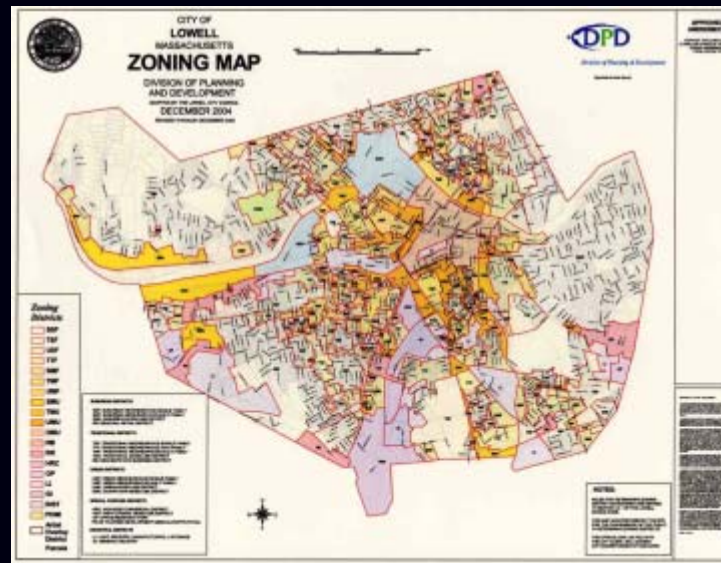
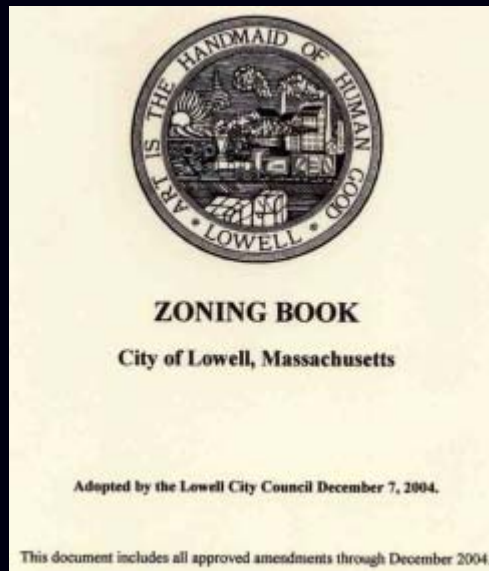


Adopting Innovative Form-Based Codes in Massachusetts: The Lowell Example

George Proakis
City of Lowell, Massachusetts



New England: Traditional Development

New England: Traditional Development



New England: Traditional Development



New England Today: Recent Development



New England: Traditional Development



New England Today: Recent Development



New England: Traditional Development



New England: Traditional Development



New England Today: Recent Development



New England: Traditional Development



New England Today: Recent Development



The Appliance and The Grid



"We know what the appliance is

- Christopher Alexander

The Appliance and The Grid



"We know what the appliance is

Now we need to find the plugs to connect it to the existing power grids."

- Christopher Alexander

The Appliance and The Grid

- Villages, towns and cities
- Good designs
- High quality mixed use projects
- Transit-oriented development
- Smart growth
- New urbanism



- Town meeting
- ZBA
- Planning Board
- Conservation Commission
- Town Engineer
- Fire Chief
- State Regulators
- Etc.

"We know what the appliance is

Now we need to find the plugs to connect it to the existing power grids."

- Christopher Alexander

Limitations of Existing Tools

- Regulation of Uses
- Setbacks
- Open space
- Parking requirements
- Density
- Site plan review
- Special permits
- Cluster subdivision
- 40B
- Design guidelines
- Historic regulations

Downtown Lowell: A Model of Heritage Planning for Economic Development



The Neighborhoods: Traditional Development Typologies



The Neighborhoods: Traditional Development Typologies



The Neighborhoods: Traditional Development Typologies



The Neighborhoods: Traditional Development Typologies



The Neighborhoods: The Infill Challenge



The Neighborhoods: The Infill Challenge



The Neighborhoods: The Infill Challenge



The Neighborhoods: The Infill Challenge



Lowell's 'Form-based' Innovation

1. The Transect-Based Map
2. Form-Based Setback Regulations
3. Future Plans
 - Subdivision Standards
 - Neighborhood Business Districts
 - Hamilton Canal District

The Transect Based Map

The Transect Based Map

- New districts based upon transect system
- Districts defined by philosophy of development
- New districts applied to map to reflect neighborhood character.

The Transect Based Map

Districts:

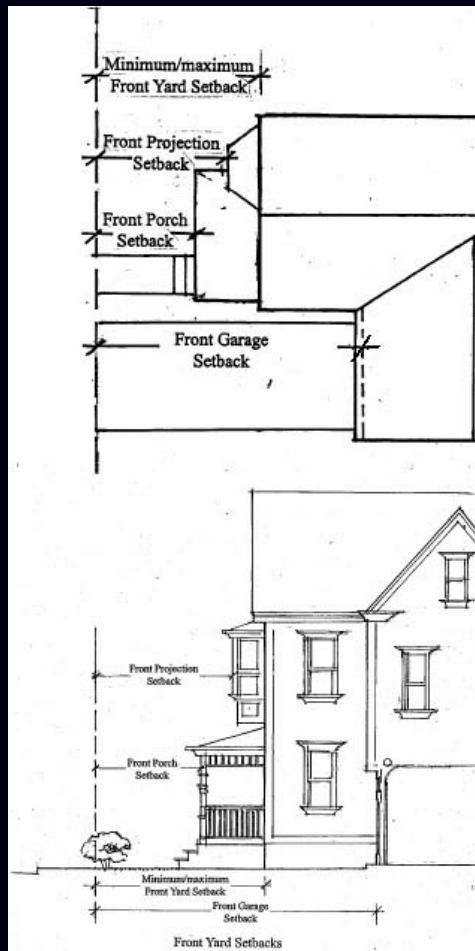
- Suburban: SSF, SMF
- Traditional Neighborhoods: TSF, TTF, TMF, TMU
- Urban Neighborhoods: USF, UMF, UMU, DMU
- Others: OP, RR, LI, GI, etc.

Form-Based Setback Regulations

Form-Based Setback Regulations

- Multiple front-yard setbacks, particularly in 'traditional' districts
- Limitations on front-facing garage doors
- Limitations requiring front landscaping
- Allowances to match existing buildings on each side

Form-Based Setback Regulations



Results So Far . . .

















Results: Developer Reviews

- After initial confusion, the process has become easier to understand
- Local architects understood it first, and have worked to develop contextual plans
- Department advising has helped, but a more formal design review, particularly for by-right projects may be required
- Developers have generally been more successful selling projects at a premium by following design recommendations
- While abutters still oppose projects, there is less fear of poorly designed infill
- Neighborhood groups recognize that we had a design problem, not a density problem

Future Projects

Future Projects: Subdivision Standards

- Address different standards for different transect zones
- Design streets appropriate for pedestrians as well as vehicles
- Encourage traffic calming measures to keep traffic slow on subdivision streets
- Encourage stormwater management practices that are appropriate for the level of urban or suburban development



Future Projects:

The 'Neighborhood Business' District

Future Projects: The 'Neighborhood Business' District



Future Projects: The 'Neighborhood Business' District



Future Projects: The 'Neighborhood Business' District

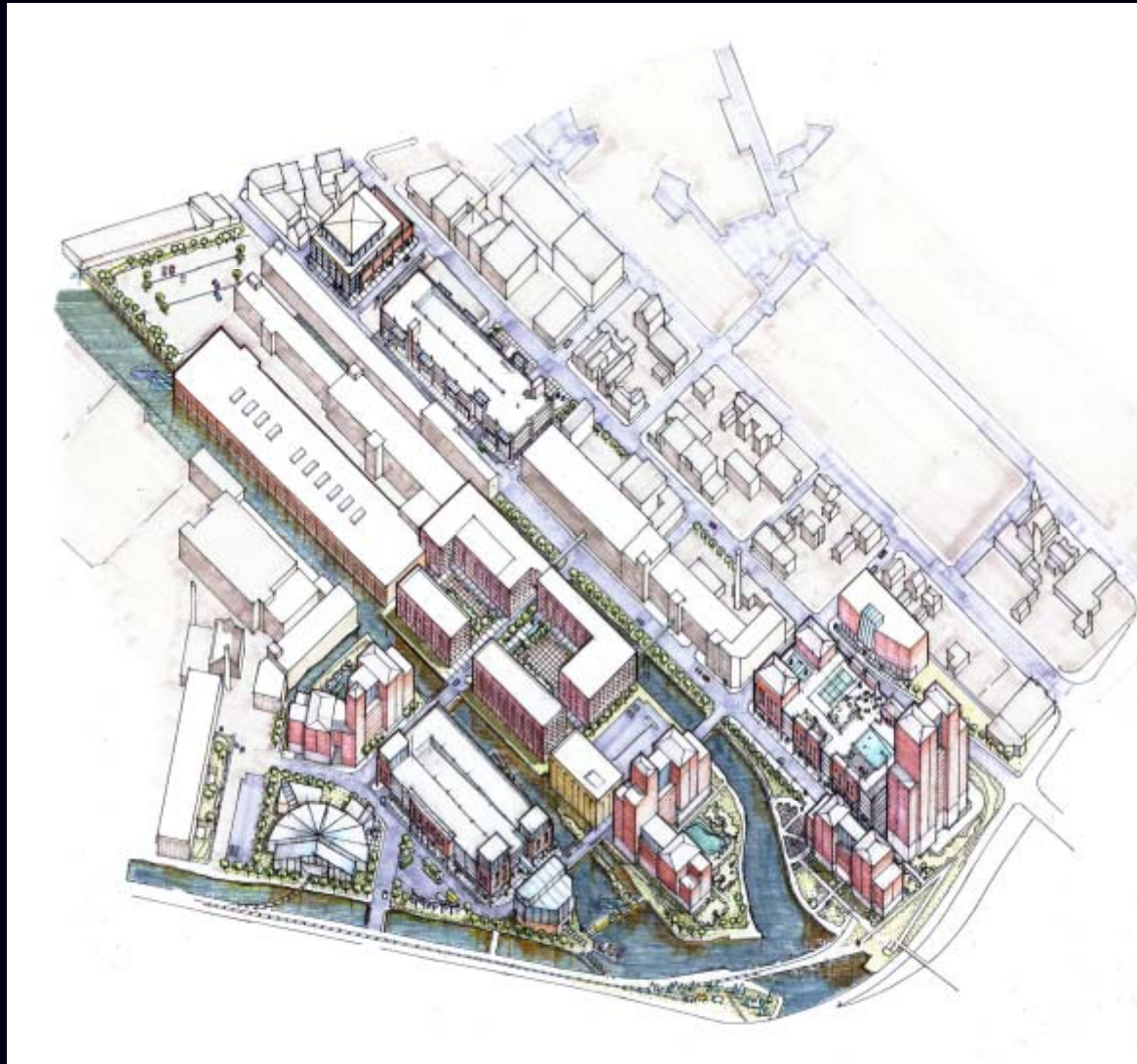


Future Projects: The 'Neighborhood Business' District



Future Projects: Hamilton Canal District

Future Projects: Hamilton Canal District



Future Projects: Hamilton Canal District



Future Projects: Hamilton Canal District

The Hamilton Canal Entitlement Process:

- Land Assembly
- Master Developer / Designer Solicitation
- Selection of Developer / Designer
- Planning Charrette
- Form-Based Code
- Construction and Occupancy

Future Projects: Hamilton Canal District

Advantages to the Charrette / Form Based Codes Process:

- Risk Reduction: Public-private partnership that limits the risk to both the city and the developer.
- Site Value: One entity controls adjacent parcels and achieves economies of scale.
- Feasibility: Project elements are feasible for finance and construction.
- Cohesiveness: Decisions on disposition and use of the entire site are made at one time,
- Collaboration: A public participation process that is focused on finding negotiated solutions and allowing stakeholders to enter the process before a development plan is finalized.
- Efficiency: Project will reach the highest use of taxable land in the shortest period of time.
- Balance: Site designs encourages a balanced mix of uses, providing more financial stability to both the developer and the city
- Certainty: The form-based code creates certainty for the developer, saving time and money in the approval process and limiting reviews
- Achievement of Objectives: The process is designed to ensure that the site achieves all of the project objectives.

Challenges to Implementation

- MGL 40A and 41
- Cost of charrettes and codes
- Local willpower to change zoning
- Moving from implementation to enforcement

Where to start with Form-Based Codes

- Community initiated projects
 - 40R and 40S districts
 - Downtown and village centers
 - Easing into form-based residential standards
- Comprehensive Approaches
 - Standards for Special Permit approval
 - Neighborhood and town-wide applications

For more information . . .

- Resource Binder: Legal and Practical Aspects of Form-Based Land Use Regulation in Massachusetts
- Form-Based Codes Institute:
www.formbasedcodes.org
- City of Lowell Zoning: at www.lowellma.gov

Conclusion

Form follows regulation